No.



200500108

THE UNITED SHATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Commonwealth Scientific and Industrial Research Organisation

MACCERS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITIORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE WE PURPOSE. OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT UBY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'FM.991B2R'

In Cestimon Marrot. I have hereunto set my hand and caused the seal of the Mant Antisty Protection Office to be affixed at the City of Washington, D.C. this twelfth day of December, in the year two thousand and five.

Attest:

genz-

Commissioner Plant Variety Protection Office Agricultural Marketing Servici ry of Agriculture

| REPRODUCE LOCALLY, Include form number and date on all reproductions Form Approved - OMB No. 0581-0055 | | | | | | | | | | |
|---|--|------------------|---|--|---|-------------------|---------------|-----------------------|---|-----|
| U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE | | | The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995. Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). | | | | | | | |
| APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) | | | " | U.S.C. 2421). Information is held con | fidential un | itil certificate | e is issued i | (7 U.S.C. 2426). | | |
| 1. NAME OF OWNER | | | 2. | TEMPORARY DESIGNATION OR EXPERIMENTAL NAME | | ETY NAME | | | | |
| Commonwealth Scientific and Industrial Research Organisation | | | | FMX415B2R | FM 99 | | | | | |
| 4. ADDRESS (Street and No., or R.F.D. No., City, | State, and ZI | P Code | e, and Country) | 5. | TELEPHONE (include area code) | | | OFFICIAL | USE ONLY | |
| Limestone Avenue | | | | (026) 799-1584 | PVPO N | /A | A A | 4 a A | | |
| Campbell ACT 2612 | | | 6. | FAX (include area code) | & V | 05 | 00 | 708 | | |
| Australia | | | (| 026) 799-2427 | FILING | DATE | | | | |
| 7. IF THE OWNER NAMED IS NOT A "PERSON", | SIVE FORM | OF | 8. IF INCORPORATED, GIVE | | 9. DATE OF INCORPORATION | | | | | |
| ORGANIZATION (corporation, partnership, associ | ciation, etc.) | | STATE OF INCORPORATION | JANUARY 31, 200 | | | 1,2005 | | | |
| Government | | | , | | | | | | | |
| 10. NAME AND ADDRESS OF OWNER REPRESE | NTATIVE(S) | TO SE | ERVE IN THIS APPLICATION. (Fin | st perso. | n listed will receive all papers) | £ | | | ATION FEES: | |
| Susan J. Mack | | | | | | s | \$ 0, | 600 101 | سريرا | |
| Sughrue Mion PLLC | | | | | | REC | CERTIFIC | ATION FEE | 105 | |
| 2100 Pennsylvania Avenue, N.W. WASHINGTON, DC 20037-3213 | | | | | | E | s (0 8 | 32.0 | 00 | |
| | | | | | | V E | | ~ | 105 | |
| · | | | - - | - | | D | , i | 1166 | -100 | |
| 11. TELEPHONE (Include area code) | • | | area code) | | 13. E-MAIL | | | | | |
| (202) 293-7060 14. CROP KIND (Common Name) | (202) | | ME (Botanical) | | smack@sughrue.com 18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) | | | | | |
| Cotton | Malvace | | (2000.0000) | | YES NO | | | | | |
| 15. GENUS AND SPECIES NAME OF CROP | | | ETY A FIRST GENERATION HYB | RID? IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR | | | | | | |
| Gossypium hirsutum | ΠY | ES | ☑ NO | | COMMERICALIZATION. 94-308-01p, 00-342-01p, 95-045-01p | | | | | |
| CHECK APPROPRIATE BOX FOR EACH ATTA (Follow instructions on reverse) | CHMENT S | JBMIT | TED | 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 63(a) of the Plant Variety Protection Act) | | | | | | |
| a. Exhibit A. Origin and Breeding History | of the Variet | ′ | | | YES (If "yes", answer in 21. DOES THE OWNER SPECIFY | tems 21 an | d 22 below; | | O (If "no", go to item . BE LIMITED AS TO | |
| b. Exhibit B. Statement of Distinctness | | | | . NUMBER OF CLASSES? | | | | | | |
| c. Exhibit C. Objective Description of Vari | ety | | | ☐ YES ☐ NO IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED | | | | | | |
| d. Exhibit D. Additional Description of the | | | | | IF YES, WHICH CLASSES? 22. DOES THE OWNER SPECIFY | ∐ FOUN THAT SE | ED OF THE | ∟ REGIST S VARIETŸ | BE LIMITED AS TO | IED |
| e. Exhibit E. Statement of the Basis of the | | | | | NUMBER OF GENERATIONS | 5? | | | | |
| f. Voucher Sample (2,500 viable untreate verification that tissue culture will be de repository) | | | | | YES NO | ER 1,2,3, € | etc. FOR E/ | ACH CLAS | S. | |
| g. Filing and Examination Fee (\$3,652), m | ade payable | to "Tre | easurer of the United | | ☐ FOUNDATION ☐ RE | GISTEREC | о 🗆 с | RTIFIED | | |
| States" (Mail to the Plant Variety Protect | | | | | (If additional explanation is nec | | | | | .) |
| 23. HAS THE VARIETY (INCLUDING ANY HARVES FROM THIS VARIETY BEEN SOLD, DISPOSES OTHER COUNTRIES? | OF, TRANS | RIAL) (SFERF | OR A HYBRID PRODUCED RED, OR USED IN THE U.S. OR | 24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? | | | | | | |
| 🗹 YES 🗌 NO | | | | YES NO | | | | | | |
| IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) | | | | | IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) | | | :D | | |
| 25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. | | | | | | | | | | |
| The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. | | | | | | | | | | |
| Owner(s) is (are) informed that false representa | Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties. | | | | | | | | | |
| SIGNATURE OF OWNER SIGNATURE OF OWNER | | | | | | | | | | |
| NAME (Please print or type) | | | | NAME | (Please print or type) | , | | | 1 1 1 1 1 1 1 1 1 1 | |
| Gregory A. Constable | | | | l | egory A. Constable | | | | | * |
| CAPACITY OR TITLE | | DATE | - Dai 211 | CAPA | CITY OR TITLE | DATE | | | **** * | |
| Program Leader 17 Decot | | | | Prog | ram Leader | | | | | |

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvpindex.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Australia: First sold September 1 2003 USA: First sold February 12 2004

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

US Patents include: 5,633,435; 5,500,365; 5,424,200; 5,359,142; 5,352,605; 5,322,938; 5,196,525; 5,188,642; 5,164,316; 4,940,835 and 4,535,060. PBR Australia: Accepted March 18 2004: application number 2004/040

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE **EXHIBIT A ORIGIN AND BREEDING HISTORY** OF THE VARIETY 2. TEMPORARY DESIGNATION 3. VARIETY NAME NAME OF APPLICANT(S) OR EXPERIMENTAL NUMBER FM 991B2R Commonwealth Scientific and Industrial FMX415B2R Research Organisation 5. TELEPHONE (Include area code) 6. FAX (Include area code) 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) +61 2 67992427 +61 2 67991584 Limestone Avenue

7. PVPO NUMBER

2005 00 108

In 1998, line CPI140533 containing the Cry2Ab gene was imported from Monsanto Corp. USA and crossed with Sicot 289RRi. Four subsequent backcrosses were done at ACRI, Narrabri, with the final being line 99454 × Sicot 289RRi. Following a selfing generation in the glasshouse approximately 80 plants were selected in the field in 2000/01 on the basis of Cry1Ac and Cry2Ab expression, resistance to glyphosate herbicide, leaf hair, disease resistance, lint % and fibre quality. Following progeny row testing for yield, disease resistance and fibre quality in 2001/02, 14 lines proceeded to replicated, multi site trials. Over the seasons of trialing to date, emphasis has been placed on yield and fibre quality under full season production systems and resistance to verticillium and fusarium wilt. The best line from this screening was FMX415 to be released as FM 991B2R.

Campbell ACT 2612

Australia

FM 991B2R has been observed for four generations of reproduction and during the seed increase period and is stable and uniform. No variants were observed.

| U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE | | |
|--|--|----------------------------|
| EXHIBIT B STATEMENT OF Distninctness | | |
| NAME OF APPLICANT(S) | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER | 3. VARIETY NAME |
| Commonwealth Scientific and Industrial | FMX415B2R | FM 991B2R |
| Research Organisation | | |
| . ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) | 5. TELEPHONE (Include area code) | 6. FAX (Include area code) |
| Limestone Avenue | +61 2 67991584 | +61 2 67992427 |
| Campbell ACT 2612 Australia | 7. PVPO NUMBER | 005 0 0 1 0 8 |

PER MAIL 5/10/05

The following table describes how FM 991B2R differs from its eomparator, DP 555BG/RR. FM 991B2R contains the Cry2Ab gene from Monsanto while DP 555BG/RR does not; FM 991B2R has lower height to first fruiting branch than DP 555BG/RR; FM 991B2R has less nodes to the first fruiting branch than DP 555BG/RR; FM 991B2R is shorter than DP 555BG/RR; FM 991B2R has longer peduncles than DP 555BG/RR; FM 991B2R has greater stigma distance above stamens than DP 555BG/RR; FM 991B2R has lower lint percentage than DP 555BG/RR.

Table of distinguishing characters

| | • | |
|---|-------------|--------------|
| · | FM 991B2R | DP 555BG/RR |
| | | A1 |
| Second Bollgard® II gene (Cry2Ab) | Present | Absent |
| Height to first faviting brough (am) | | • |
| Height to first fruiting branch (cm) Mean | 17.3 | 23.3 |
| | 15.3-18.7 | 20.6-26.0 |
| Range | 2.47 | 20.0-20.0 |
| LSD (1%) | 2.47 | D < 0.01 |
| Significance | | P ≤ 0.01 |
| No. of nodes to first fruiting branch | • | |
| Mean | 6.5 | 7.3 |
| | 6.1-6.7 | 6.9-7.9 |
| Range | 0.39 | 0.7-7.7 |
| LSD (1%) | 0.37 | $P \le 0.01$ |
| Significance | | T ≥ 0.01 |
| Plant height (cm) | | |
| Mean | 120.0 | 132.8 |
| Range | 106.8-130.3 | 119-141 |
| | 7.62 | 117 111 |
| LSD (1%) Significance | 7.02 | P ≤ 0.01 |
| Significance | | 1 20.01 |
| Peduncle length (mm) | | |
| Mean | 23.7 | 20.2 |
| Range | 21.0-25.2 | 16.8-25.0 |
| LSD (1%) | 2.57 | 10.0 20.0 |
| Significance | 2.31 | $P \le 0.01$ |
| Significance | | 1 2 0.01 |

| Mean | 4.5 | 3.4 |
|-----------------|-----------|--------------|
| Range | 3.9-5.0 | 2.0-4.8 |
| LSD (1%) | 0.82 | |
| Significance | · | $P \le 0.01$ |
| Lint percentage | | |
| Mean | 36.1 | 43.1 |
| Range | 33.8-37.1 | 41.7-44.7 |
| LSD (1%) | 1.34 | ÷ |
| Significance | | $P \le 0.01$ |

Data was obtained from a pooled analysis based on the following two trials:

BCSI Research Station, Leland MS, 2004. Conditions: field grown irrigated trial with conventional management. Trial design: 5 entry trial in a row and column design with six replicates and 14m plots. Measurements on 10 plants from each plot.

Australian Cotton Research Institute, Narrabri, NSW, 2003/04 summer. Conditions: field grown irrigated trial with conventional management. Trial design: 24 entry trial in a row and column design with six replicates and two rows x 14m plots. Measurements on 10 plants from each plot.

Analysis of variance procedures were used to obtain least significant difference statistics at the 1% level.

EXHIBIT C (COTTON)

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY COTTON (Gossypium spp.)

| | | | 11 / | | <u> </u> |
|---|---|-------------------------------------|--|--|--|
| NAME OF APPLICANT(S) | | | TEMPORARY DESIG | NATION V | ARIETY NAME |
| Commonwealth Scientific | and Industrial Research | h Organisation | FMX415B2R |] | FM 991B2R |
| ADDRESS (Street and No., or R.I | F.D. No., City, State, and Z | IP Code) | | | CIAL USE ONLY |
| Limestone Avenue | • | | | PVPO NUI | |
| Campbell ACT 2612 Australia | | | , · | 2005 | 00108 |
| Place the appropriate data that describ measurements, should represent those plant colors. Characters marked with a | that are typical for the variety | y. Royal Horticultural | Society or any recognized of | cs described, inc color fan may be | cluding numerical used to determine |
| SPECIFIC VARIETIES USED FO varieties which are adapted to you | OR COMPARISON AS CF r area. One of the compari | HECK VARIETIES son varieties must b | IN THIS APPLICATION the most similar variety | N: Use standar y used in Exhil | d regional check oit B. |
| Variety 1. DP 555BG/R | R Variety 2. | | | | |
| *1. SPECIES: | hirsutum L. | ☐ G. barbadense | 2 L. | | |
| *2. AREA(S) OF ADAPTATION | I: (A = Adapted, NA = Nc | ot Adapted, NT = N | ot Tested) | | |
| A Eastern | NT D | elta | NT Central | | |
| NT Blacklands NT Plains Other (Specify) | NT W | estern | NT Arizona | N | Γ San Joaquin |
| 3. GENERAL: General Plant Typ | pe. | | | | |
| | Application Variety | Comparison Varie | ety 1 Comparison Va | ariety 2 Co | omparison Variety 3 |
| Plant Habit: Spreading, Intermediate, Compact | Intermediate | Intermediate | | | |
| Foliage: Sparse, Intermediate, Dense | Intermediate | Intermediate | | | |
| • | | | | | |
| Stem Lodging: Lodging, Intermediate, Erect | Erect | Erect | | · · | |
| Fruiting Branch: Clustered, Short, Normal | Short | Ñormal | √ | the state of the s | |
| Growth: | CHUIT | _ 101 M2H1 | | | |
| Determinate, Intermediate, Indeterminate | Indeterminate | Indeterminate | | | • |

| 3. GENERAL: (continued) Leaf Color: Greenish yellow, Light green, Medium green, Dark green | Medium green | Medium green | | |
|--|------------------------------|------------------------------|------------------|--|
| Boll Shape: Length less than wid | Ith, | · | | |
| Length equal to width, Length more than width | Length > Width | Length > Width | | |
| Boll Breadth: Broadest at base, Broadest at middle | Broadest at middle | Broadest at middle | | |
| *4. MATURITY: (50 % Open b | polls; Preferred method; Des | cribe method if different me | ethod was used.) | |
| Date of 50 % open bolls | October 2 | October 4 | | |
| 5. PLANT: | | · | | |
| cm to 1st Fruiting Branch: (from cotyledonary node) | 17.3 | 23.3 | | |
| No. of Nodes to 1st Fruiting Bra (excluding cotyledonary node) | anch: 6.5 | 7.3 | | |
| Mature Plant Height cm: | | 4 | | |
| (cotyledonary node to terminal) | 120.0 | 132.8 | | |
| *6. LEAF: Upper most, fully exp | panded leaf. | | | |
| Type: Normal, Sub Okra, Okra, Super Okra | Normal | Normal | | |
| Pubescence: Absent, Sparse, Medium, Dense <u>OR</u> Trichomes/c | m ² | • | | |
| (Bottom surface excluding veins) | | Sparse | | |
| Nectaries: Present or Absent | Present | Present | | |
| *7. STEM PUBESCENCE: Glabrous, Intermediate, Hairy | Intermediate | Intermediate | | |
| *8. GLANDS: (Gossypol) Absen | t, Sparse, Normal, More Th | an Normal | | |
| Leaf: | Normal | Normal | | |
| Stem: | Normal | Normal | | |
| Calyx Lobe: (normal is absent) | Normal | Normal | | |
| *9. FLOWER: | | | | |
| Petals: Cream, Yellow | Cream | Cream | | |
| Pollen: Cream, Yellow | Cream | Cream | | |
| Petal Spot: Present, Absent | Absent | Absent | | |

| *10. SEED: | | | |
|--|---------------------------------------|--|---------------------------------------|
| Seed Index: (g/100 seed, fuzzy basis) | 10.1 | 8.9 | |
| | 10.1 | 0.5 | |
| Lint Index: | | | |
| (g lint/100 seeds) | 6.8 | 6.9 | |
| *11. BOLL: | | | |
| Lint Percent: Picked Pulled | · · · · · · · · · · · · · · · · · · · | | <u> </u> |
| OR | , | | |
| Gin Turnout: | | | |
| ⊠Picked | 36.1 | 43.1 | · |
| Number of Seeds per Boll | 28.2 | 28.1 | |
| Grams Seed Cotton per Boll | 4.8 | 4.6 | · . |
| Number of Locules per Boll | 4.0 | 4.2 | |
| Boll Type: (Stormproof, Storm Resistant, Op | en) Open | Open | |
| 12. FIBER PROPERTIES: | | | |
| Specify Method (HVI or other): | HVI | | |
| * Length: (inches, 2.5% SL) | 1.17 | 1.15 | |
| * Uniformity: (%) | 84.7 | 83.0 | · . |
| * Strength, T1 (g/tex) | 29.2 | 26.5 | · · · · · · · · · · · · · · · · · · · |
| * Elongation, E1 (%) | 6.6 | 7.0 | · |
| * Micronaire: | 4.3 | 4.4 | |
| Fineness (Source |) | | <u> </u> |
| Yarn Tenacity: (cN/tex, 27 tex) | | The state of the s | · . |
| Yarn Strength: (lbs. 22's) | | | |

Ø

| | NT | Alternaria macrospora | NT | Fusarium Wilt |
|---|---------------------------------|---|---------------------|--|
| - | NT | Anthracnose | NT | Phymatotrichum Root Rot |
| • | NT | Ascochyta Blight | NT | Pythium (specify species) |
| | R | Bacterial Blight (Race 1) | NT | Rhizoctonia solani |
| | R | Bacterial Blight (Race 2) | NT | Southwestern Cotton Rust |
| | R | Bacterial Blight (Race 18) | NT | Thielayiopsis basicola |
| | NT | Diplodia Boll Rot | MR | Verticillium Wilt |
| | | Other (marife) | | |
| | ODES, INS = Resistant) | | = Susceptible, MS = | = Moderately Susceptible, MR = Moderately |
| | | SECTS AND PESTS: (NT = Not Tested, S | | = Moderately Susceptible, MR = Moderately |
| | | SECTS AND PESTS: (NT = Not Tested, S | NT | Reniform Nematode |
| | = Resistant) | SECTS AND PESTS: (NT = Not Tested, S | | |
| | = Resistant) NT | SECTS AND PESTS: (NT = Not Tested, S = Root-Knot Nematode | NT | Reniform Nematode |
| | = Resistant) NT NT | SECTS AND PESTS: (NT = Not Tested, S Root-Knot Nematode Boll Weevil | NT NT | Reniform Nematode Grasshopper (specify species): |
| | = Resistant) NT NT R | SECTS AND PESTS: (NT = Not Tested, S = Root-Knot Nematode Boll Weevil Bollworm | NT NT NT | Reniform Nematode Grasshopper (specify species): Lygus (specify species): |
| | = Resistant) NT NT R NT | SECTS AND PESTS: (NT = Not Tested, S = Root-Knot Nematode Boll Weevil Bollworm Cotton Aphid | NT NT NT R | Reniform Nematode Grasshopper (specify species): Lygus (specify species): Pink Bollworm |
| | = Resistant) NT NT R NT NT NT | SECTS AND PESTS: (NT = Not Tested, S = Root-Knot Nematode Boll Weevil Bollworm Cotton Aphid Cotton Fleahopper | NT NT R NT NT | Reniform Nematode Grasshopper (specify species): Lygus (specify species): Pink Bollworm Spider Mite (specify species): |
| | = Resistant) NT NT R NT NT NT R | Root-Knot Nematode Boll Weevil Bollworm Cotton Aphid Cotton Fleahopper Cotton Leafworm | NT NT R NT NT | Reniform Nematode Grasshopper (specify species): Lygus (specify species): Pink Bollworm Spider Mite (specify species): Stink Bug (specify species): |

^{15.} COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

FORM APPROVED - OMB No. 0581-0055

| · · · · · · · · · · · · · · · · · · · | FORWIAF | PROVED - OWID 140. 0301-0033 | | | |
|---|--|---|--|--|--|
| U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held | | | | | |
| EXHIBIT E | confidential until the certificate is issue | ed (7 U.S.C. 2426). | | | |
| STATEMENT OF THE BASIS OF OWNERSHIP | | | | | |
| NAME OF APPLICANT(S) | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER | 3. VARIETY NAME | | | |
| Commonwealth Scientific and Industrial | FMX415B2R | FM 991B2R | | | |
| Research Organisation | | | | | |
| ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) | 5. TELEPHONE (Include area code) | 6. FAX (Include area code) | | | |
| | +61 2 67991584 | +61 2 67992427 | | | |
| Limestone Avenue | | | | | |
| Campbell ACT 2612 7. PVPO NUMBER 2005 0 0 1 0 8 | | | | | |
| Australia | & VV | 00108 | | | |
| 8. Does the applicant own all rights to the variety? Mark an "X" in the | appropriate block. If no, please explai | n. | | | |
| YES NO | | • | | | |
| · | | | | | |
| | | | | | |
| 9. Is the applicant (individual or company) a U.S. national or a U.S. ba | ased company? If no, give name of co | ountry. | | | |
| YES NO Australia | | | | | |
| | | | | | |
| 10. Is the applicant the original owner? YES | NO If no, please answer one | of the following: | | | |
| a. If the original rights to variety were owned by individual(s), is (| are) the original owner(s) a U.S. Nationa | ıl(s)? | | | |
| YES | NO If no, give name of countr | | | | |
| | | | | | |
| | | | | | |
| b. If the original rights to variety were owned by a company(ies), | is (are) the original owner(s) a U.S. bas | ed company? | | | |
| YES | NO If no, give name of country | | | | |
| · | | | | | |
| | | | | | |
| 11. Additional explanation on ownership (If needed, use the reverse for | or extra space): | | | | |
| • | • | ÷ | | | |
| | • | | | | |
| | | | | | |
| PLEASE NOTE: | | | | | |
| FLEMBE NOTE. | | | | | |
| Plant variety protection can only be afforded to the owners (not licens | , | • | | | |
| If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals of | erson must be a U.S. national, national of the U.S. for the same genus and specified. | of a UPOV member country, or es. | | | |
| If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a c genus and species. | red the original breeder(s), the company country which affords similar protection t | must be U.S. based, owned by o nationals of the U.S. for the same | | | |
| 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria. | | | | | |
| The original breeder/owner may be the individual or company who direct for definitions. | ected the final breeding. See Section 4 | 1(a)(2) ot the Plant Variety Protection | | | |
| According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, control number. The valid OMB control number for this information collection is 0581-0055, response, including the time for reviewing the instructions, searching existing data sources, g | The time required to complete this information collec- | tion is estimated to average 6 minutes per | | | |
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ST-470-E (04-03)